

# Comparisons of Job Characteristics

**Focus Occupation:** Locomotive Engineers (53-4011)

**Associated Occupation:** Locomotive Firers (53-4012)

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<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 88

**Focus Occupation:** Locomotive Engineers (53-4011)

**Associated Occupation:** Locomotive Firers (53-4012)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Transportation	4.6	12.9	13.9	0	Current knowledge level may be sufficient
Mechanical	6.8	12.4	7.9	<<	Extensive education and/or training may be required
Public Safety and Security	6.9	11.8	8.7	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 87

**Focus Occupation:** Locomotive Engineers (53-4011)

**Associated Occupation:** Locomotive Firers (53-4012)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation Monitoring	6.6	12.7	13.3	0	Current skill level may be sufficient
Operation and Control	5.4	12.0	13.6	>	Skill level is likely sufficient
Troubleshooting	4.5	7.9	7.1	<	A higher skill level may be required
Equipment Maintenance	3.5	6.6	2.3	<<	Extensive development of skills in this area may be required
Repairing	3.4	6.0	1.9	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 90

Focus Occupation: Locomotive Engineers (53-4011)

Associated Occupation: Locomotive Firers (53-4012)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Far Vision	7.8	13.8	14.7	0	Current ability level may be sufficient
Reaction Time	4.8	13.0	14.4	>	Current ability level is likely sufficient
Selective Attention	8.7	12.2	13.0	0	Current ability level may be sufficient
Control Precision	6.6	11.8	14.4	>	Current ability level is likely sufficient
Response Orientation	4.0	11.4	13.6	>	Current ability level is likely sufficient
Glare Sensitivity	2.6	7.6	7.6	0	Current ability level may be sufficient
Night Vision	2.1	6.4	6.2	0	Current ability level may be sufficient
Peripheral Vision	2.2	6.4	7.4	>	Current ability level is likely sufficient
Sound Localization	2.2	5.8	5.4	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 100

Focus Occupation: Locomotive Engineers (53-4011)

Associated Occupation: Locomotive Firers (53-4012)

Work Activities	Exclusivity of Activity
Examine vehicle to detect malfunctions, damage, or maintenance needed	75
Inspect railroad equipment	89
Monitor railroad vehicle or equipment operation	89
Monitor variables affecting route activities	89
Observe track to detect obstructions	99
Operate locomotives, dinkey engines, or other rail vehicles	92
Perform safety inspections in transportation setting	62
Transport passengers or cargo	64
Understand railroad signals	89
Understand technical operating, service or repair manuals	6
Use two-way radio or mobile phone	42

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: n/a

**Focus Occupation: Locomotive Engineers (53-4011)**  
**Associated Occupation: Locomotive Firers (53-4012)**

Tools and Technologies	Exclusivity
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Tools and technology data is unavailable for one or both occupations.
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Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.